

Topic 4. Diversity Exploratory

Introduction. In this activity you practice using your microscope by identifying examples of organisms studied by botanists.

Procedure. This lab is a type of scavenger hunt. Explore the samples provided macroscopically and microscopically until you have found and drawn examples of the organisms listed. Have your TA credit your discovery by checking off each drawing on the class data sheet. Write down any additional info about each that your TA may give you. Also indicate the magnification represented by your drawing.

1. **An autotrophic prokaryote.** These are photosynthetic bacteria lacking a nucleus or any other obvious subcellular component. Examples may be found in the bowl at the front.

2. **An heterotrophic prokaryote.** In lab, these are colorless rod or sphere-shaped bacteria lacking a nucleus or any other obvious subcellular component. Some are flagellated and free-swimming. Examples may be found in the bowl at the front.

